

# Home Task: Sports Betting Backend

## Goal

Build a minimal backend that enables simulated betting: ingest odds, place bets, track a virtual account balance with individual bets, and expose results.

## Technical Abilities Required

- NestJS
- Data retrieval from external APIs (e.g., games and odds)
- Relational database for persistence

## Implementation Steps

### 1. Odds service (microservice)

- Pull odds into a local PostgreSQL database.
- Provide an easy refresh endpoint/command to keep games and odds up to date.
- You can use a free-tier provider such as <https://the-odds-api.com/>.
- Generate random results for running and finished games to settle bets.
- Provide an endpoint to list games with odds

### 2. Betting service (microservice)

- Allow users to place bets.
- Expose an endpoint to fetch user status (list of all bets with their status) and account balance.

### 3. Interaction options

- Provide a Postman collection / curl examples covering the main flows

## Notes

- Prevent human errors in bet actions (validation, duplicates, limits, insufficient funds).
- Code should be written in **NestJS**.
- Don't focus on setting up docker-compose to run applications. Running them manually from package.json is sufficient.
- Optional nice-to-haves: basic tests, logging.

**Good luck!**